# Starting Over Planning For A New Child Support Enforcement System

A Description and Discussion

a presentation of the Office of Child Support Enforcement

# Today's Panelists

- Eileen Coughlin,
   New Jersey's Office of Child
   Support and Paternity
- Nancy Starling Ross,
   PSI Technologies, Inc
- Joe Bodmer,
   Federal OCSE

# The Planning Phase

The Planning APD

#### Purpose of a Planning APD

First: a planning APD provides the federal government with the initial start-up data necessary to fund a state's planning activities for a new automation project

Second: an APD provides the state and federal agencies with the kind of high level data generally used to monitor a project's progress

#### Types of APD's

#### Two Major Types of APD Submissions

- Planning APD
   Used to seek reimbursement for planning costs
- Implementation APD
   Used to seek reimbursement for costs of designing, developing, and implementing a system

#### Planning APD

- Generally used in support of major system development projects, as opposed to less complex computer acquisitions like hardware and software buys
- This is a brief document of usually not more than 15-30 pages

- 1. Problem Statement
- 2. Project Management Plan (PMP)
- 3. Planning Budget
- 4. Total Project Cost Estimate

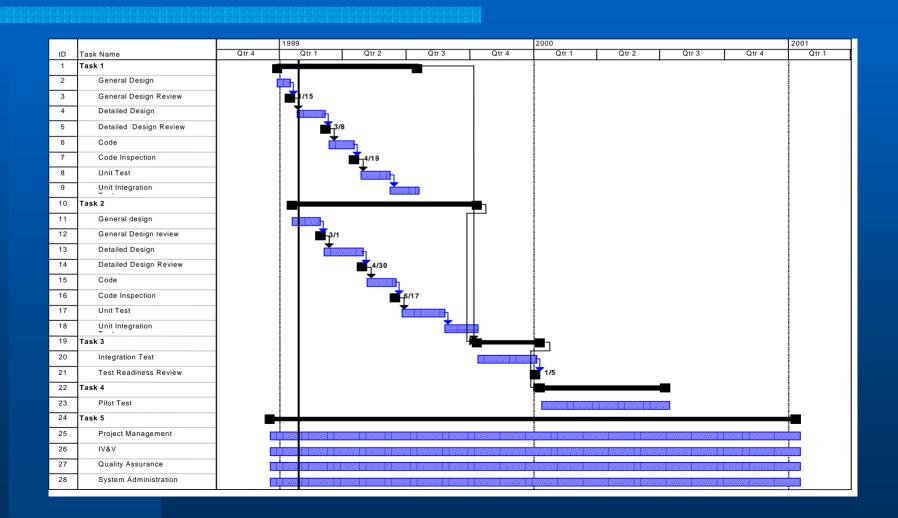
#### The Problem Statement

- a. 1-3 pages of general discussion of the problem(s) faced by the agency and of the need to seek a remedy
- b. Cites examples of issues and problems being faced

#### The Project Management Plan (PMP)

- a. Provides a list of key personnel
- b. Provides an organization chart for the planning effort
- c. Provides a task-oriented list of planning activities to be conducted including project schedule information

#### A Project Schedule Example



#### The Project Management Plan (PMP)

- The task-oriented list of activities to be conducted must include commitments to conduct a:
  - Needs Assessment
  - Feasibility Study
  - ✓ Alternatives Analysis
  - Cost Benefit Analysis

#### The Project Management Plan (PMP)

- Other task-oriented activities that a PMP might include are:
  - ✓ Developing RFP's / ITB's
  - **✓** Conducting procurements for:
    - Quality Assurance and IV&V
    - Software development
    - Project management support
    - Hardware and Software purchasing
    - Implementation APD development, etc.

#### Planning Budget

- Provide a budget spreadsheet showing costs broken-down by Federal Fiscal Quarter (FFQ) and summed to the Federal Fiscal Year (FFY).
- Best presentation is to have one page per FFY.
- Have last column of each budget spreadsheet show state and Federal shares for each FFY

#### **Budget Categories Include:**

- State staff,
- contractors (listed by contract), hardware and software,
- training,
- miscellaneous/supplies,
- travel,
- data center (listing both operations and development separately).

#### The Implementation APD

- Executive Summary
- 2. Statement of Needs and Objectives
- Feasibility Study (Includes a summary of the study and the Analysis of Alternatives)
- 4. Project Management Plan
- 5. Interface Requirements
- 6. Security
- 7. Budget (Including cost allocation, if needed)
- 8. Cost Benefit Analysis

# FEASIBILITY, ALTERNATIVES AND COST BENEFIT

ANALYSIS

A Description and Discussion

# FEASIBILITY STUDIES

# IN COMPLEX, LARGE SCALE APPLICATION DEVELOPMENT PROJECTS

### Feasibility Studies: Purpose

- The Preliminary Study That Determines Whether a Proposed Systems Project is Technically, Financially, and Operationally Viable
- The Foundation for Approval of the Project's IAPD

#### Feasibility Studies

- Include an Alternatives Analysis, Identifying Viable Options for System Design and Development. Together, They Provide:
  - Analysis of the System Objectives, Functional Requirements, and System Design Concepts
  - Feasibility of Applying Automation To
     Economically Improve Program Operations
  - Evaluation of Each of the Alternatives and Selection of an Optimal Solution

#### Feasibility Study Process

- Describe the Status Quo
- Define the Problem
- Define System Objectives
- Identify System Constraints and Assumptions
- Develop Initial Requirements
- Assess Project Feasibility

#### Describe the Status Quo

- Understanding of How the Current System Works
  - Work Flow Analysis
  - Technical Architecture of Hardware
  - Software Components
  - Manual Components
  - Interfaces

#### Define the Problem

- What Functionality is Missing or in Need of Automation From the Current System
- What Functionality is in Need of Improvement or Modification in the Current System
- Obsolescence of Technological Platforms and Architectures

### Define System Objectives

- Functionality for the New System
  - Added
  - Automated
  - Improved
- Define Technical and Organizational Objectives
- Define Ranking Criteria to Evaluate Alternatives

## Identify System Constraints

- Law and Regulations
- Technological
- Socio-political
- Financial
- Operational
- Functional

### Identify Assumptions

- Cost and Budget
- Resources
- Functional and Programmatic
- Technical
- Organizational
- System Life

### Identify Assumptions

- Include All Assumptions That Will Affect the Analysis
- Document the Logic Underlying the Assumptions

# Initial Requirements

- Reorganize All of the Previous Work Into a List of Requirements the System Must Fulfill
- Ensure Requirements Definitions for the Current System Were Considered
- Identify the Universe of Existing and Theoretical Options

#### Assess Project Feasibility

- Assess Project Feasibility
   Against the Universe of Options:
  - Technical
  - Political
  - Impact on Users
  - Cost
  - Resources
  - Risk
  - Organizational

#### Results

- Ability to Reduce the Universe of Potential Options to 2-4 Realistic Possibilities
- These Now Undergo Detailed Evaluation as Part of the "Analysis of Alternatives"

# ALTERNATIVES ANALYSIS

# IN COMPLEX, LARGE SCALE APPLICATION DEVELOPMENT PROJECTS

### Alternatives Analysis

# An Analysis Which Considers the Alternatives Available for Automation.

### Development Alternatives

- Status Quo
- Enhance Existing System
- New Development
- Transfer
- Hybrid

#### Technical Alternatives

- Client Server vs. Main Frame
- Thin Client vs. Thick Client
- Web Technology vs Closed System
- Distributed vs. Centralized
- Custom vs. COTS

#### Alternatives Analysis

- Map Requirements to Hardware, Software, Processes and Personnel.
- Determine Risks and Effects
- Rank Alternatives
- Delete Non-viable Alternatives

#### Determine Risks and Effects

- Program Impact
- Equipment Impact
- Software Impact
- Information Impact
- Organizational Impact
- Operational Impact
- Developmental Impact

# COST BENEFIT ANALYSIS

# IN COMPLEX, LARGE SCALE APPLICATION DEVELOPMENT PROJECTS

# Cost Benefit Analysis

Detailed Evaluation of the Costs and Benefits of Each Alternative Identified During the Alternatives Analysis Is Critical ...

... Pass or Fail Critical!
From a Federal Standpoint!

#### Costs

- Cost the Status Quo
- Cost Alternatives to Status Quo
- Identify and Characterize All Costs
- Determine Whether to Use Constant or Current Dollars
- Build Each Cost Profile Year by Year

# Cost the Status Quo

- Cost of Maintaining Current System With No Enhancements.
- Used As Control Group to Evaluate Other Alternatives.

## Cost Alternatives to Status Quo

Recurring Costs

Non-Recurring Costs

# Identify and Characterize Costs

- Hardware
- Software
- Training
- Personnel
- Database Conversion
- Other (examples in Guide)

#### **Determine Constant or Current \$**

- Project Constant Dollar Cost and Benefits
- Convert Constant Dollars to Current Dollars
- Convert Future Dollars to Today's Dollars

# Build Each Cost Profile Year by Year

- Estimate Effort Based on Metrics
  - COCOMO
  - Price-S
  - Function Points
- Compare to Similar Systems
- Run Experiments
- Measure Actuals

#### Benefits

- Identify and Characterize All Benefits
  - Tangible Benefits
  - Intangible Benefits

# Identify and Characterize All Benefits

- Increased Collections
- Reduced Error Rates
- Reduced Costs
- Reduced Staffing
- Improved Security
- Improved Access
- Improved Interface

# Tangible Benefits

- Derive Cost Saving From Benefit
- Document Assumptions Used in Derivation

# Intangible Benefits

- List and Rate
- Examples
  - Worker Satisfaction
  - System Downtime
  - User Friendliness
  - Useful Life of System

# Cost Benefit Analysis

- Convert Costs and Benefits to Current Dollars
- Compare Quantitative Factors
  - Net Benefit (Cost)
  - Benefit/Cost Ratio Based on the Full System Life Cycle
  - Breakeven or Payback

## Cost Benefit Analysis: Issues

- Apply Assumptions, Costs, and Benefits Evenly Across All Alternatives
- Costs Are Not Always Known but May Be Estimated in a Range or With a Given Probability.
- Decide Evaluation Criteria Up-front
- Intangible Benefits May Matter

# COST BENEFIT ANALYSIS

**Evaluation Criteria** 

#### **Evaluation Criteria**

- Are Results Credible
- Are Assumptions and Estimates Reasonable
- Are Results Reproducible
- Are Assumptions Applied Evenly Across All Alternatives

# Analysis Guide Evaluation Criteria

- That a Status Quo is Thoroughly Described
- That All Reasonable Alternatives Were Considered
- That a Full Cost Benefit Analysis to at Least Two (2) Alternatives is Accomplished
- That Alternatives Were Evaluated on System Life Cycle Basis
- That Present Value Analysis Was Used

### Analysis Evaluation Criteria (cont'd)

- That Cost and Benefit Projections Appear Reasonable
- That Net Benefits or Ratios Were Calculated for All Alternatives
- That the Study Resulted in a Clear Cost and Benefit Plan
- Results Are Summarized for Selection Justification in the IAPD

#### **OVERVIEW**

# OCSE'S TYPICAL REVIEW PROCESS BASED UPON PAST EXPERIENCE

# OCSE Typical FS Review

- OCSE Review Process Is Approximately Eight (8) Weeks
- Uses OCSE Staff and Contractors to Conduct the Review
- Review Initiated Upon State Submittal of a Feasibility Study and Cost/Benefit Analysis
- Some Prior Review and TA of Preliminary Data (E.G. Evaluation Criteria)

#### OCSE FS Review: WEEK 1

- Assemble Team OCSE Lead, OCSE Contractor Staff
- Start-Up Meeting to Discuss Overall Scope Collect Documentation - FS, CBA, Status Quo Document, Historical Data

#### OCSE FS Review: WEEK 2

- Initial Contractor Staff Review of Documentation
- Develop Initial Set of Comments
- Develop List of Questions for State Staff
- Develop Agenda for On-Site Review with the State

#### OCSE FS Review: WEEK 3

- On-Site Review With State Staff
- Provide Initial Comments to the State
- Ask Questions Developed During Initial Review
- Interview State and Their Contractors On the Processes Used to Develop the FS
- Collect Additional Documentation

#### OCSE FS Review: WEEKS 4-6

- Detailed Review of FS, CBA, and Other Documentation
- Follow-Up Conference Calls With State Staff, As Required
- Draft Report Developed by OCSE
   Contractor and Submitted to OCSE Lead

#### OCSE FS Review: WEEKS 7-8

- OCSE Lead Review of the Draft Report
- Additional Follow-Up Calls With the State As Required
- Incorporate OCSE Lead Comments Into Report
- Release Final Report

#### OCSE FS Review: Documentation

- Final FS, CBA, and Status Quo Document
- Interim Versions of Documents
- White Papers
- Review Correspondence (Review Comments and Responses)
- Requirements Analysis Documentation
- Gap Analysis

#### References

- Title 45 Public Welfare and Human Services Code of Federal Regulations (CFR), Part 307--Computerized Support Enforcement Systems
- Title 45 Public Welfare and Human Services Code of Federal Regulations (CFR), Part 95--General Administration-Grant Programs (Public Assistance and Medical Assistance)
- Title 45 Public Welfare and Human Services Code of Federal Regulations (CFR), Part 74 - Uniform Administrative Requirements for Awards and Subawards to Institutions of Higher Education, Hospitals, Other Nonprofit Organizations, and Commercial Organizations; and Certain Grants and Agreements with States, Local Governments and Indian Tribal Governments

#### References

- U.S. Department of Health and Human Services, Administration for Children and Families and Health Care Finance Administration – State Systems APD Guide, September 1996
- U.S. Department of Health and Human Services, Administration for Children and Families, Office of Child Support Enforcement – Addendum to State Systems APD Guide for Child Support Enforcement Systems, March 1999
- Action Transmittal OCSE-AT-90-11, Policy Clarification Relating to Automated Child Support Enforcement Systems, October 9, 1990

#### References

- U.S. Department of Health and Human Services, Administration for Children and Families, Office of Child Support Enforcement – Automated Systems for Child Support Enforcement: A Guide for States, Revised April 1999, Updated December 1999
- U.S. Department of Health and Human Services, Administration for Children and Families – Feasibility, Alternatives, and Cost/Benefit Analysis Guide, July 1993
- U.S. Department of Health and Human Services, Administration for Children and Families, Office of Child Support Enforcement – Cost/Benefit Companion Guide, August 1994
- U.S. Department of Health and Human Services, Administration for Children and Families - Companion Guide 3: Cost/Benefit Analysis Illustrated for Child Support Enforcement Systems, September 2000

# Closing

# Questions & Answers

http://www.acf.hhs.gov/programs/cse/stsys/!cse.htm

#### Thanks To Our Guests

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